

ATTACHMENT A

Marked Up Version Showing Amendments Made

(language added is underlined and language deleted in enclosed in brackets)

In the Specification

At page 1, the Title is amended as indicated below:

Microcellular Foam and Foamed Composite Material [Expandable Polymeric Fibers and Their Method of Production]

At page 1, insert before the first sentence:

-- This is a divisional application of co-pending application Serial No. 09/840,317, filed April 23, 2001, which is a divisional of application Serial No. 09/458,220, filed December 9, 1999, now U.S. Patent 6,221,486; all of which applications are incorporated by reference herein in their entirety. --

In the Claims

Claims 20-23 are amended as indicated below:

20. (1st Time Amended) A microcellular foam comprising expanded hollow fibers fused to each other, each hollow fiber comprising a polymeric shell surrounding a continuous series of one or more internal gaseous voids, the polymeric shell comprising polymer chains that are at least partially radially oriented.
21. (1st Time Amended) A microcellular foam according to claim 20 wherein the hollow fibers are derived from thermo-expandable fibers, the thermo-expandable fiber characterized by a polymeric wall surrounding a continuous series of one or more pockets of blowing agent, the polymeric wall comprising reactive functionalities.
22. (1st Time Amended) A foamed composite material comprising expanded hollow fibers fused to a surrounding matrix, each hollow fiber comprising a polymeric shell surrounding a continuous series of one or more internal gaseous voids, the polymeric shell comprising polymer chains that are at least partially radially oriented.

23. (1st Time Amended) A foamed composite material according to claim 22 wherein the hollow fibers are derived from thermo-expandable fibers, the thermo-expandable fiber characterized by a polymeric wall surrounding a continuous series of one or more pockets of blowing agent, the polymeric wall comprising reactive functionalities.

New claims 27-44 are added, as follows:

-- 27. A microcellular foam according to claim 20 wherein the hollow fibers are derived from thermo-expandable fibers, the thermo-expandable fiber characterized by a polymeric wall comprising a polymer and one or more reactive oligomers or crosslinkable moieties capable of forming a crosslinked, interpenetrating, or semi-interpenetrating polymeric network within the polymeric wall.

28. A microcellular foam according to claim 20 wherein the polymeric shell comprises an engineering thermoplastic polymer.

29. A microcellular foam according to claim 20 wherein the polymeric shell comprises a copolymer, multiblock polymer, or polymer blend.

30. A microcellular foam according to claim 20 wherein the polymeric shell comprises a naturally occurring polymer.

31. A microcellular foam according to claim 30 wherein the naturally occurring polymer is selected from the group consisting of polysaccharides, lipids, and proteins.

32. A microcellular foam according to claim 30 wherein the naturally occurring polymer is Zein.

33. A microcellular foam according to claim 21 wherein the blowing agent is a liquid.

34. A microcellular foam according to claim 21 wherein the blowing agent is a solid at room temperature.

35. A microcellular foam according to claim 21 wherein the blowing agent is insoluble and is in the shape of a cylinder, a strand or a fiber.

36. A foamed composite material according to claim 22 wherein the hollow fibers are derived from thermo-expandable fibers, the thermo-expandable fiber characterized by a polymeric wall comprising a polymer and one or more reactive oligomers or crosslinkable moieties capable of forming a crosslinked, interpenetrating, or semi-interpenetrating polymeric network within the polymeric wall.
37. A foamed composite material according to claim 22 wherein the polymeric shell comprises an engineering thermoplastic polymer.
38. A foamed composite material according to claim 22 wherein the polymeric shell comprises a copolymer, multiblock polymer, or polymer blend.
39. A foamed composite material according to claim 22 wherein the polymeric shell comprises a naturally occurring polymer.
40. A foamed composite material according to claim 39 wherein the naturally occurring polymer is selected from the group consisting of polysaccharides, lipids, and proteins.
41. A foamed composite material according to claim 39 wherein the naturally occurring polymer is Zein.
42. A foamed composite material according to claim 23 wherein the blowing agent is a liquid.
43. A foamed composite material according to claim 23 wherein the blowing agent is a solid at room temperature.
44. A foamed composite material according to claim 23 wherein the blowing agent is insoluble and is in the shape of a cylinder, a strand or a fiber. --